WHAT IS CLAIMED IS:

- 1. A process for producing glucose-1-phosphate, comprising the steps of culturing bacteria of the genus *Corynebacterium* in a medium containing a saccharide and at least 1 mM of phosphoric acid or a derivative or salt thereof, and collecting glucose-1-phosphate produced and accumulated in the medium.
- 2. The process according to Claim 1, wherein the bacteria of the genus Corynebacterium are selected from Corynebacterium callunae,

 Corynebacterium glutamicum and Corynebacterium vitaeruminis.

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- 3. The process according to Claim 2, wherein the bacterial of the genus Corynebacterium are selected from Corynebacterium callunae IFO 15359, Corynebacterium glutamicum JCM 1321 and Corynebacterium vitaeruminis JCM 1323 strains.
- 4. The process according to any one of Claims 1 to 3, wherein the saccharide is at least one selected from monosaccharides, disaccharides, oligosaccharides and polysaccharides containing glucose as a constitutive saccharide

5. The process according to any one of Claims 1 to 4, wherein the concentration of phosphoric acid, or the derivative or salt thereof is in the range of from 1 mM to 1 M.

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